

CLAIMS

What is claimed is:

1. A method of determining an applicable list item for a command input received in list navigation of a list comprised of a sequence of list items during execution of a voice application program written in a declarative markup language using a computer system, the method comprising:

determining a current list item corresponding to the list item in the sequence of list items that is either: (a) currently being played back by the computer system; or (b) was the most recent list item already played back by the computer system;

exposing within a runtime environment of the declarative markup language a relative time corresponding to an amount of time from the start of playback of the current list item until when the command input was received;

comparing the relative time to a predetermined time corresponding to an amount of allowed target window overlap; and

selecting the applicable list item based on the comparing and the current list item.

2. The method of claim 1, wherein the selecting comprises setting the applicable list item to the current list item when the relative time is greater than the predetermined time.

3. The method of claim 1, wherein the selecting comprises setting the applicable list item to the current list item when the relative time is greater than or equal to the predetermined time.

4. The method of claim 1, wherein the previous list item comprises the list item preceding the current list item in the sequence of list items and wherein the selecting comprises setting the applicable list item to the current list item when the relative time is less than or equal to the predetermined time.

5. The method of claim 4, wherein if the current list item comprises first list item in sequence of list items, then the previous list item comprises the current list item.

6. The method of claim 1, wherein the previous list item comprises the list item preceding the current list item in the sequence of list items and wherein the selecting comprises setting the applicable list item to the current list item when the relative time is less than the predetermined time.

7. The method of claim 1, wherein the command input comprises a command selected from the set “that one”, “buy it”, “tell me more”, “more”, “previous”, “next”, “delete”, and “repeat”.

8. The method of claim 1, wherein the voice application program has a corresponding executable program code and wherein the executable program code further includes at least a first markup tag for indicating that subsequent tags comprise playback of a list item, and wherein the exposing the relative time comprises setting a variable in the runtime environment to correspond to the amount of time from when the first markup tag was encountered until the command input was received by the computer system.

9. The method of claim 1, wherein the list comprises a list of items for purchase and wherein the command input comprises a request to purchase the applicable list item.

10. An apparatus for determining an applicable list item for a command input received in list navigation of a list comprised of a sequence of list items during execution of a voice application program written in a declarative markup language, the apparatus comprising:

means for determining a current list item which is either being presented aurally or has completed aural presentation when no subsequent list item has started to be played back;

means for computing a relative time from the start of playback of the current list item until the command input was received; and

means for selecting the applicable list item from the relative time and the current list item.

11. A method of determining a selection from a plurality of options in a voice application written in a declarative markup language, the method comprising:

presenting the plurality of options in a list format aurally using a computer system; and

responsive to an input, the input corresponding to a voice command, determining the selection from the plurality of options using a partially overlapping target windows implemented in the declarative markup language using a mark semantic that provides a relative offset from the mark to the time the command was received.

12. The method of claim 11 wherein the plurality of options comprises a group of phonotactically similar grammar options.
13. The method of claim 11 wherein the plurality of options comprises an n-best list provided by an automatic speech recognition system.